#### U.S. DEPARTMENT OF ENERGY

# Office of Electricity, Delivery and Energy Reliability



# ENERGY ASSURANCE DAILY

August 29, 2005

#### **Highlights/Major Developments**

**Update: Hurricane Katrina** 

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Hurricane Katrina Situation Report #8
August 29, 2005 (4:00 PM EDT)

#### HIGHLIGHTS

In response to Hurricane Katrina crude oil prices spiked to a high of almost \$71 but have since pulled back to nearly \$67. Actual damage estimates from the hurricane and possible restoration times will not be available for some time.

The Nuclear Regulatory Commission reports that all nuclear power plants have taken precautions and have contingency plans in place based on operating procedures.

Katrina is now a Category 1 Hurricane with maximum sustained winds near 95 mph. The storm is expected to track North near 18 mph. The storm is located 20 miles West-Southwest of Hattiesburg, Mississippi. At this current track the storm will continue to move over Southern Mississippi and into Central Mississippi this evening and tonight. Latest NOAA information on the storm track is available at: <a href="http://www.nhc.noaa.gov/text/refresh/MIATCPAT2+shtml/291856.shtml">http://www.nhc.noaa.gov/text/refresh/MIATCPAT2+shtml/291856.shtml</a>

The Strategic Petroleum Reserve has shut down all operations in New Orleans and personnel have evacuated. Operations at Bayou Choctaw have been shut down and personnel evacuated. West Hackberry, Big Hill, and Bryan Mound remain operational. A storm watch team is currently at the Stennis site.

The following table displays refineries (>45,000 b/d capacity) located in States impacted by Hurricane Katrina. Approximately, 2 million barrels a day of capacity has been shut in accounting for roughly 25 percent of the Gulf Coast refining capacity and over 10 percent of US refining capacity.

#### Refineries Located in States Impacted by Hurricane Katrina

|                                  |             |               | Bbl/day    |   |
|----------------------------------|-------------|---------------|------------|---|
| COMPANY_NAME                     | STATE       | SITE          | (calendar) | Status                                      |
| Citgo Petroleum Corp.            | Louisiana   | LAKE CHARLES  | 324,300    | May reduce runs tomorrow                    |
| ConocoPhillips                   | Louisiana   | BELLE CHASSE  | 247,000    | Shutdown                                    |
| ConocoPhillips                   | Louisiana   | WESTLAKE      | 239,400    | Loss of imports - Calcasieu<br>River closed |
| Chalmette Refining LLC           | Louisiana   | CHALMETTE     | 187,200    | Shutdown                                    |
| ExxonMobil Refining & Supply Co. | Louisiana   | BATON ROUGE   | 493,500    | Reduced Runs                                |
| Marathon Ashland Petroleum LLC.  | Louisiana   | GARYVILLE     | 245,000    | Shutdown                                    |
| Murphy Oil USA Inc.              | Louisiana   | MERAUX        | 120,000    | Shutdown                                    |
| Motiva Enterprises LLC           | Louisiana   | CONVENT       | 235,000    | Shutdown                                    |
| Motiva Enterprises LLC           | Louisiana   | NORCO         | 226,500    | Shutdown                                    |
| Shell Chemical LP                | Louisiana   | SAINT ROSE    | 55,000     |   |
| Placid Oil                       | Louisiana   | PORT ALLEN    | 48,500     | Shutdown                                    |
| Valero Refining Co Louisiana     | Louisiana   | KROTZ SPRINGS | 80,000     | Reduced runs                                |
| Valero Saint Charles Refinery    | Louisiana   | NORCO         | 185,003    | Shutdown                                    |
| Chevron USA Inc.                 | Mississippi | PASCAGOULA    | 325,000    | Shutdown                                    |
| PREMCOR                          | Tennessee   | MEMPHIS       | 180,000    | Reduced runs                                |

#### **PIPELINE INFORMATION**

Colonial Pipeline temporarily shutdown both of its mainlines (1 and 2) late this morning due to loss of electrical power. These lines go from Houston, TX to Greensboro, NC. Rates had been reduced in the morning prior to the power outage to ensure integrity of the lines. Sublines continue to operate. Colonial moves refined petroleum products.

Dixie Pipeline shutdown today. As of 2:00 pm today all terminals are closing (except Milner, GA and Apex, NC) since product is not moving through the system. Dixie moves propane.

Calpine crude oil pipeline shutdown. Calpine normally carries 1,100,000 B/D of crude oil.

Chevron's Sabine Pipeline reopened Henry Hub delivery point for natural gas this afternoon after shutting it down as a precaution as Hurricane Katrina approached and passed. The pipeline had declared force majeure yesterday.

Many natural gas pipelines have shutdown as a result of Hurricane Katrina. These include:

| Name                     | Capacity Reduced in mmcfd |
|--------------------------|---------------------------|
| Williams Transco         | 1,500                     |
| El Paso Tennessee        | 1,100                     |
| El Paso Southern Natural | 850                       |
| Panhandle Florida Gas    | 700                       |
| Loew's Gulf South        | 600                       |
| Panhandle Trunkline      | 450                       |
| Panhandle Sea Robin      | 400                       |
| NiSource Columbia Gulf   | undisclosed               |
| Kinder Morgan NGPL       | undisclosed               |
| Duke Texas Eastern       | undisclosed               |

#### **ELECTRICITY INFORMATION**

**STATE OUTAGE DATA (8/29/05 1:30 PM)** 

|               |               |                        | % Customers w/o |
|---------------|---------------|------------------------|-----------------|
|               | Customers     |                        | Power from      |
| Utility       | w/o Power     | <b>Total Customers</b> | Katrina         |
| Alabama (1)   | 193,920       | 2,339,004              | 8%              |
| Florida       | 382,849       | 9,075,577              | 4%              |
| Louisiana (1) | 905,075       | 2,130,925              | 42%             |
| Mississippi   | Not Available |                        |                 |
| Total         | 1,481,844     | 13,551,887             | 11%             |

(1) Source: EIA 2003

#### **STATE REPORTS**

#### Alabama

Approximately 193,920 customers are without power in Alabama due to Katrina. Of these, 172,456 are in the Alabama Power service area. In addition, 21,464 REA COOP customers have reported outages. Municipals have not yet reported.

#### Louisiana

■ Louisiana Public Service Commission reports some 905,075 customers without power (as of 1:00 PM on 8/29) including the following:

| Electric Utility               | Customers w/o<br>Power | Number of<br>Consumers (1) | % customers<br>w/o power |
|--------------------------------|------------------------|----------------------------|--------------------------|
| Entergy Louisiana Inc          | 409,399                | 653,929                    | 63%                      |
| Entergy Gulf States Inc        | 118,000                | 342,443                    | 34%                      |
| Cleco Power LLC                | 70,014                 | 257,299                    | 27%                      |
| Entergy New Orleans Inc        | 215,163                | 190,124                    | 113%                     |
| Dixie Electric Membership Corp | 57,425                 | 81,769                     | 70%                      |
| Washington-St Tammany E C, Inc | 20,000                 | 41,304                     | 48%                      |
| South Louisiana Elec Coop Assn | 13,874                 | 18,730                     | 74%                      |
| Morgan City City of            | 1,200                  | 6,316                      | 19%                      |
| Total                          | 905,075                | 1,591,914                  | 57%                      |

(1) Source: EIA Electric Sales and Revenues 2003

#### **Florida**

- Approximately 382,849 customers (as of 3:30 PM on 8/29) remain without power in Florida due to Katrina. Of these, 264,200 are in the Florida Power & Light service area. Municipals and Coops hit by Katrina in southern Florida are largely restored; however, Gulf Power is now beginning to report outages due to the storm impacting its service area.
- FPL continues to anticipate 90% restoration by late Tuesday night (8/30) in the hard hit counties of Miami-Dade and Broward.

#### **Additional Information:**

#### Gulf of Mexico Shut-in Production MMS release #3327

Based on the latest data available from the Minerals Management Service, 75.09% of 819 manned platforms and 71.64% of 137 rigs currently operating in the GOM have been evacuated as of 11:30 a.m. August 29. Shut in oil production is 1,375,413 BOPD or 91.69% of daily production (which is currently approximately 1.5 million BOPD), and shut-in gas is 8.299 BCFPD or 82.99% of daily production (which is currently approximately 10.0 BCFPD). The cumulative shut-in oil production for the period 8/26/05 - 2/29-05 is 3,133,859 bbls or 0.572% of annual production. The cumulative shut-in production for the period 8/26/05 - 8/29/05 is 15,447 TCF of 0.423% of annual production.

This survey is reflective of 4 companies' reports as of 11:30 a.m. Central Time.

| Districts              | Lake<br>Jackson | Lake<br>Charles | Lafayette | Houma    | New<br>Orleans | Total     |
|------------------------|-----------------|-----------------|-----------|----------|----------------|-----------|
| Platforms<br>Evacuated | 75              | 129             | 137       | 112      | 162            | 615       |
| Rigs<br>Evacuated      | 11              | 19              | 18        | 26       | 22             | 96        |
| Oil, BOPD<br>Shut-in   | 89,487          | 39,476          | 220,006   | 321,263  | 705,181        | 1,375,413 |
| Gas, MMCF/D<br>Shut-In | 813.28          | 1,321.82        | 1,052.77  | 1,809.39 | 3,302.17       | 8,299.42  |

http://www.mms.gov/ooc/press/2005/press0827.htm

#### **Electricity**

#### Update - Faulty Sensor Caused Power Outages in Southern California Last Week

A false alarm from an oil flow sensor inside an electric power transformer north of Los Angeles caused a major transmission line to fail. The line automatically shut down triggering power outages affecting more than 400,000 customers in Fontana, La Puente, Cathedral City, Huntington Beach, Long Beach and Ontario for about 35 minutes.

http://www.washingtonpost.com/wp-dyn/content/article/2005/08/26/AR2005082600308.html

#### **Texas Genco Parish Unit 5 Restarting**

According to a report filed by Texas Genco with regulators in Texas, the company will restart its 646 MW W A Parish unit 5 plant on August 29. The unit had been down for repairs on a boiler tube. Reuters 10:45, August 29, 2005.

#### **AEP Welsh Unit 5 Returning to Service Soon**

According to a report filed by AEP with regulators in Texas, the company will restart its 528 MW unit 2 at its Welsh plant sometime between August 29 and August 31. The unit automatically tripped off line on August 28.

Reuters 10:39, August 29, 2005.

#### **Dresden Unit 3 Ramps up to 99 Percent**

According to the daily report of the Nuclear Regulatory Commission, the 850 MW unit 3 at Exelon Corp's Dresden nuclear generating station in Illinois had ramped up to 99 percent of capacity by Monday morning August 29.

Reuters 08:06, August 29, 2005.

#### SCANA's Summer Plant Ramps up to 100 Percent

The 966 MW Summer nuclear generating station of SCANA Corp returned to full power according to the daily report of the Nuclear Regulatory Commission. The plant had shut down on August 25 when a fire in a pump motor resulted in the company declaring an unusual event. Reuters 08:00, August 29, 2005.

#### **Hope Creek Shuts for Repair**

On August 28, Public Service Enterprise Group shut its 1,049 MW Hope Creek nuclear generating station in New Jersey to repair an emergency control valve.

Bloomberg 10:16, August 29, 2005.

#### **Entergy Shuts Waterford Nuclear Plant as Katrina Approaches**

On August 28, Entergy shut down its Waterford nuclear generating station in New Orleans and in addition, it also shut the Michoud natural gas and oil-fired station near New Orleans to in an effort to avoid damage to equipment from the hurricane-force winds and potential flooding from hurricane Katrina.

Bloomberg 11:18, August 29, 2005.

Reuters 15:22, August 29, 2005.

#### TXU Shuts Sandow Unit 4 to Repair Boiler Tube

According to a report by TXU Corp to Texas regulators, the company has shut its 553MW unit 4 at the Sandow generating facility to repair a boiler tube. There was no indication as to when the plant would return to service.

Reuters 15:30, August 29, 2005.

#### OPG's 490 MW Coal-fired Unit 6 at its Nanticoke Generating Facility in Ontario Shut August 29

Reuters 15:22, August 29, 2005.

#### PG&E's 407 MW Hydro Unit 2 at its Helms Generating Facility in California Shut August 29, 2005

Reuters 16:12, August 29, 2005.

### SCE's 205 MW Coal-fired Unit 1 at its Mohave Generating Facility in Nevada Shut

August 29

Reuters 16:12, August 29, 2005.

For additional information on electricity, see Highlights/Major Developments

#### **Petroleum**

#### NYMEX Trading Frenzy Spurred by Fears of Katrina's Effects

October opened \$3.04/bbl higher on the New York Mercantile Exchange at \$69.17/bbl today as Hurricane Katrina hit Louisiana and "triggered panic-style buying in overnight trading." New Orleans is a main hub that accounts for a quarter of U.S. oil and gas production

http://www.platts.com/Oil/News/6066078.xml?S=n

http://www.cnn.com/2005/WEATHER/08/29/hurricane.katrina/index.html

#### LOOP Shut This Past Weekend

Due to Hurricane Katrina, the Louisiana Offshore Oil Port (LOOP) shut down this past weekend, halting 1 million-bpd of crude imports, a tenth of the nation's total.

http://money.cnn.com/2005/08/28/news/international/bc.markets.oil.reut/index.htm?cnn=yes

#### **Administration to Consider Loaning Crude from SPR**

The President indicated a willingness to release supply from its 700-million-barrel Strategic Petroleum Reserve if refiners request it. Administration officials say that a full assessment will be conducted before the reserves are tapped.

Bloomberg 13:35, August 29, 2005.

http://money.cnn.com/2005/08/28/news/international/bc.markets.oil.reut/index.htm?cnn=yes

#### **Refinery Problem Forces Sinclair to Allocate**

According to sources in the area, a problem with a fluid catalytic cracking unit at its 70,000 b/d refinery in Wyoming has led Sinclair to allocate product. The sources indicate that the unit is likely to be out of service of about a week. The output from the FCC runs to approximately 13,000 b/d of gasoline and 4,500 b/d of distillates.

OPIS 14:05, August 29, 2005.

#### OPEC President to Propose 500,000 b/d Increase in Both Ceiling and Supply

Today, OPEC President Sheikh Ahmed Fahed al-Sabah expressed the group's concern over high oil prices and said he may propose an increase of its output ceiling, currently at 28-mil b/d, by 500,000 b/d and an additional 500,000 b/d increase in actual supply. The output hike will be proposed at the next ministerial meeting, which will be held in Vienna on September 19, 2005. http://www.platts.com/Oil/News/6066009.xml?S=n

#### **Gasoline Hits Record High**

According to the latest data from Lundberg Survey, the average price of gasoline hit an all-time high of \$2.63 per gallon on August 26. The data were gathered from a national survey of 7,000 retail outlets. Reuters 16:40, August 29, 2005.

For additional information on petroleum, see Highlights/Major Developments

#### **Natural Gas**

#### Natural Gas Climbs by to New Record on NYMEX

Hurricane Katrina propelled natural gas prices on the futures market to record levels during the day on concern about the potential damage to gas production as that could result from the storm. Prices shot up by as much as 23% during the day before settling at the still record price of \$10.85.

Reuters 9:51, August 29, 2005.

Bloomberg 12:09, August 29, 2005.

Reuters 16:53, August 29, 2005.

## Sempra Energy's Proposed Natural Gas Storage Facility in Louisiana Given Environmental Clearance by FERC

Sempra Energy's proposed 17 Bcf Liberty natural gas storage facility in Louisiana, designed to accommodate not only the expanding network of liquefied natural gas (LNG) projects in southeastern United States but traditional gas suppliers and customers as well, was given a favorable environmental clearance by FERC last Friday.

Source: NGI's Daily Gas Price Index posted Aug 29, 11:36 AM

http://intelligencepress.com/

# Sempra Energy's Proposed Natural Gas Terminal in Texas Given Environmental Clearance by FERC

Sempra Energy's proposed Port Arthur liquefied natural gas (LNG) terminal and associated facilities in Port Arthur, TX, which will import and deliver up to 1.5 Bcf/d of supplies, was given a favorable initial environmental review by FERC last Friday.

Source: NGI's Daily Gas Price Index

http://intelligencepress.com/

For additional information on natural gas, see Highlights/Major Developments

#### **Other News**

Nothing to report.

#### **Energy Prices**

|  | Latest (08/29/05) | Week Ago | Year Ago |
|--|-------------------|----------|----------|
| CRUDE OIL West Texas Intermediate US \$/Barrel | 67.41             | 65.46    | 42.32    |
| NATURAL GAS Henry Hub \$/Million Btu           | 9.86              | 9.44     | 5.05     |

Source: Reuters

**This Week in Petroleum** from the Energy Information Administration (EIA)

http://tonto.eia.doe.gov/oog/info/twip/twip.asp

Updated on Wednesdays

#### Weekly Petroleum Status Report from EIA

http://www.eia.doe.gov/oil\_gas/petroleum/data\_publications/weekly\_petroleum\_status\_report/wpsr.html Updated after 1:00pm (Eastern time) on Wednesdays

#### Natural Gas Weekly Update from EIA

http://tonto.eia.doe.gov/oog/info/ngw/ngupdate.asp Updated after 2:00 pm (Eastern time) on Thursdays

#### **ENSEC threat awareness blog site** from Energy Assurance

http://ensec.blogspot.com